VERSION WITH MARKINGS TO SHOW CHANGES MADE

5   IN THE CLAIMS

Please cancel Claims 39-48 without prejudice to pursue the subjective matter of these

claims in subsequent applications without acquiescence of the reasons of rejection stated in

the Office Action.

Please amend Claims 1, 6, 16, and 30 as follows:

1   1.   (Amended Twice) A system, comprising

2   a computer configured to determine a position and shape of an object of interest from

3   video images and to characterize activity of said object of interest based on analysis of

4   changes in said position and said shape over time, wherein said activity of said object of

5   interest includes eating, rearing, jumping, drinking, running, and lying of said object of

6   interest.

1   6.   (Amended) [The] A system [of claim 5,] comprising:

2   a computer configured to determine a position and shape of an object of interest from

3   video images and to characterize activity of said object of interest based on analysis of

4   changes in said position and said shape over time;

5   wherein said computer includes an object identification and segregation module

6   receiving said video images; and

7   wherein said object identification and segregation module operates using a

8   background subtraction algorithm in which a plurality of said video images are grouped into a

9   set, a standard deviation map of the set of video images is created, a bounding box where a

10   variation is greater than a predetermined threshold is remove from said set of video images,

11   and the set of images less said bounding boxes is averaged to produce a back ground image.

1   16.   (Amended Twice) A method of characterizing activity of an object using a computer,

2   comprising:

3   detecting a foreground object of interest in video images;

4   tracking said foreground object over a plurality of said video images;

5   classifying said foreground object in said plurality of video images; and

6   characterizing said activity of said foreground object based on comparison of said

7   classifications to activity of a standard object, wherein the characterizing said activity of said

8   foreground object further includes identifying a motion activity of said foreground object

9   when said classification matches with a motion activity of a standard object.

1   30.   (Amended) [The] A method of [claim 29,] characterizing activity of an object using a

2   computer comprising:

3   detecting a foreground object of interest in video images;

4   tracking said foreground object over a plurality of said video images;

5   classifying said foreground object in said plurality of video images; and

6   characterizing said activity of said foreground object based on comparison of said

7   classifications to activity of a standard object; wherein said characterizing said

8   activity includes:

9   describing a sequence of postures as behavior primitives; and

10   aggregating behavior primitives into actual behavior over a range of images;

11   wherein said [step of] describing said behavior primitives [step] further

12   includes:

13   identifying patterns of postures over a sequence of images; and

14   analyzing temporal information selected from the group consisting of direction

15   and magnitude of movement of the centroid, increase and decrease of

16   the eccentricity, increase and decrease of the area, increase and

17   decrease of the aspect ratio of the bounding box, change in the b-spline

18   representation points, change in the convex hull points, and direction

19   and magnitude of corner points.